

REMARKS**I. Specification:**

The specification has been amended to remove any reference to the claims. Replacement paragraphs have been added that contain the disclosure found in original claims 1 and 12. As the disclosure is derived from the contents of original claims 1 and 12, no additions to the original subject matter have been made. Reconsideration and removal of the objection to the specification are respectfully requested.

II. Claim Status:

Claims 1-20 are pending. Claims 1-6 and 10-20 stand rejected. Claims 7-9 are objected-to.

III. Rejections under 35 U.S.C. § 112, Second Paragraph:

Claims 1, 12 and 15 are rejected under § 112, second paragraph, as being indefinite. Claims 1, 12 and 15 have been amended to replace the term "many" modifying "tanks" with "two or more". Support for the amendment is found in the specification at paragraph 29. Entry and consideration of claims 1, 12, and 15 as amended, are respectfully requested. The amendments to claims 1, 12 and 15 render the rejections thereof moot. Reconsideration and removal of the rejections of claims 1, 12 and 15 under § 112, second paragraph, are respectfully requested.

IV. Rejections under 35 U.S.C. § 103(a):

Claims 1-6 and 10-20 stand rejected as being obvious over Newton et al. in view of Shi et al. and Dwyer et al. Applicants respectfully traverse the rejection.

Newton discloses a method and apparatus for coating articles such as bottle-

shaped containers. The apparatus employs a conveyor system as shown in FIG. 1. Containers are releasably secured to a conveyor belt which tracks along a path that includes a dipping area at which the containers are lowered into baths containing coating material. (9:6-13). After being immersed for a selected period of time, the containers are withdrawn from the bath in a two-stage process that alters the speed of withdrawal to control coating thickness and uniformity. (9:36-58).

Once the containers are fully withdrawn from the coating baths, as is to be expected with a liquid coating process, drops of uncured coating material form and migrate down the containers due to the influence of gravity. To facilitate removal of the drops, the containers are tilted while on the conveyor to allow gravity to urge drops to merge at a distinct point on the heel of the container. The drop collection point is aligned with a gas nozzle from which a burst of gas is emitted to separate the collected drops from the container so as to produce a uniformly coated container ready for curing and other final steps. (14:37-64).

Shi et al. discloses a coating composition suitable for improving the impermeability of materials used to construct containers. The material may be deposited by dipping methods (pg. 4, ¶ 40), followed by an optional step of spinning to removal excess coating material. *Id.*

Dwyer et al. discloses a method for coating the hexagonally-shaped cells of a honeycombed substrate having vertically-oriented open cells with a coating material in the form of a slurry. The substrate is dipped into a bath containing the slurry while in a vertically-oriented position so that the honeycomb-shaped open cells are also oriented vertically. The upper end of the substrate is maintained above the level of the slurry until all the air escapes from the cells. Once the air has been eliminated, the substrate is submerged. (3:26-47).

After submersion, the substrate is drained by supporting it on a screen or like apparatus to allow the excess slurry to drain. The substrate is periodically inverted to prevent the buildup of coating on any one end. (3:48-62). After initial draining, the substrate is rotated into a horizontal orientation and rotated slowly to promote a uniform layer of coating in the cells. (3:63-4:7). To promote drying, a gas such as air is forced into one end of the substrate. To ensure the coating remains uniform, the substrate is inverted about its horizontal orientation and a gas is forced in the opposite end of the substrate. (4:8-24).

When considering whether evidence exists in a cited reference, there is no rule known to Applicants that requires the overall teachings of a reference to be discounted. To the contrary, a prior art reference must be considered for all it teaches and discloses including disclosure that teaches away from the invention. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 227 U.S.P.Q. 657 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986). To do otherwise would allow references to be considered piece meal, and an applicant's disclosure to be considered as a blue print, the "essence of hindsight. *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

The teachings of Newton et al. and Shi et al. with respect to drop removal are mutual distinct and conceptually incompatible. Newton et al. employs the effects of gravity to urge drops to a concentrated single location. In contrast, Shi et al. employs the use of centripetal force to cause drops to remain segregated and to individually disengage contact with the underlying container. The purpose behind titling the containers of Newton et al. is to cause drop consolidation to allow a focused blast of gas to eliminate the drops and promote a uniform coating. By employing the spinning of Shi et al. with the tilt and gas nozzle of Newton et al., the

drops would not be concentrated, but dispersed by the centripetal force generated by the spinning container. This would prevent the gas nozzle of Newton et al. from effectively removing the drops. Instead, only a small portion of drops would be removed where the blast of gas collides with the container.

The incompatibility of Newton et al. and Shi et al. and their deficiencies as prior art references are not solved by Dwyer et al. And Dwyer is equally incompatible with Newton et al. and Shi et al. Dwyer uses gravity to allow excess coating to drain without the use of spinning. Dwyer does not promote drops to migrate to a single defined point or area for removal. Instead, drops and excess coating flow to the ends of the cells and the substrate's lower end. Slow rotational movement about a horizontal axis along with the use of forced gas through the substrate is used to exclusively promote ***uniformity of coating*** and drying, not drip and/or excess coating removal.

In complete contrast, applicant's invention, as claimed in claims 1 and 12, uses an initial step of vigorously spinning the containers while in a vertical orientation to use centripetal force to remove excess coating and/or drips. The vigorous spinning is followed by slow rotational movement about a horizontal axis to improve material flow so as to promote uniform dispersion of the coating material. The speed at which the rotation occurs does not generate enough centripetal force, even in combination with gravitational force when the forces combine at the low point of the rotating container, to promote the separation of drops from the container. Instead, the slow horizontal rotation promotes the reintegration and flow of drops into the overall coating layer to produce a uniform coating. (Pg. 4, lines 18-21). None of the prior art references, alone or in combination, includes all the elements of either claims 1 or 12, and specifically the combined spinning elements of these claims that

perform markedly different functions.

For all the foregoing reasons, claims 1 and 12 are allowable over Newton et al. in view of Shi et al. and Dwyer et al. Claims 2-6 and 13-20 are deemed allowable as they depend, directly or ultimately from claims 1 and 12. Reconsideration and removal of the rejections of claims 1-6 and 10-20 under § 103(a) are respectfully requested.

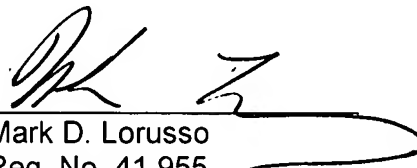
v. **Allowable Subject Matter:**

Applicants acknowledge with appreciation that claims 7-9 are deemed allowable if the § 112, second paragraph, rejections are overcome and the claims are rewritten in independent form. Applicants have addressed the § 112, second paragraph rejections, but will refrain from rewriting the claims as claim 1, from which these claims directly or ultimately depend, is allowable for all the reasons given herein.

VI. **Conclusion:**

For all the foregoing reasons, the claims are considered to define patentably over the prior art. Reconsideration is requested and favorable action is solicited.

Respectfully Submitted,



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